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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/692,457 | 10/20/2000 | Takashi Ida | 198803US2SRD | 6204 |
| 22850 | 7590 | 06/04/2004 | EXAMINER | |
| OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314 | | | LE, BRIAN Q | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2623 | |
| DATE MAILED: 06/04/2004 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/692,457

Applicant(s)

IDA ET AL.

Examiner

Brian Q Le

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4, 6 and 7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4, 6-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 October 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12-14.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Response to Amendment and Arguments

1. Applicant's amendment filed April 16, 2004, has been entered and made of record.
2. The Examiner considered the submitted IDS references (12-14). However, the Applicant must submit 1449-Form so that the Examiner can initial and sign after the consideration of each IDS.
3. Applicant's arguments with regard to claims 4, 6 and 7 have been fully considered, but are not considered persuasive because of the following reasons:

Regarding claim 4, the Applicant argues that Sambonsugi does not disclose a setting as a provisional region of an object one of plural prepared candidate regions of shape data which exhibits a largest difference between a statistical characteristic of inside pixel values and that of outside pixel values. First, the Examiner considered the support for the amendatory language (third embodiment and FIGS. 10-13C). The indicated support by the Applicant does not clearly disclose the concept of "provisional region of an object one of plural prepared candidate regions of shape data which exhibits a largest difference between a statistical characteristic of inside pixel values and that of outside pixel values". The Applicant is requested by the Examiner to clearly indicate (page and line number) the support for this amended limitation. Second, due to broadly claimed languages, one skilled in the art can make reasonable interpretation toward the claim. Specifically, the Applicant needs to clearly define the concept of "provisional region", "largest difference" and "statistical characteristic" to avoid subjective interpretations.

Furthermore, Sambonsugi discloses a setting as a provisional region of an object one of plural prepared candidate regions of shape data which exhibits a largest difference (The Examiner interprets the absolute difference discloses by Sambonsugi as the largest difference unless the

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Applicant will define a specific definition for 'largest difference'. Also, absolute difference is the calculation of the largest possible difference mathematically) between a statistical characteristic of inside pixel values and that of outside pixel values (FIG. 46, S14 and column 43, lines 10-30).

Thus, the rejections of all of the claims are maintained.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 4, 6 and 7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The Examiner considered the support for the amendatory language (third embodiment and FIGS. 10-13C). The indicated support by the Applicant does not clearly support the concept of "**provisional region** of an object one of plural prepared candidate regions of shape data which exhibits a **largest difference between a statistical characteristic of inside pixel values and that of outside pixel values**". (Emphasis added). The Applicant is requested by the Examiner to clearly indicate (page and line number) the support for this amended limitation.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 4, 6-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Sambonsugi

U.S. Patent 6,335,985.

Regarding claim 4, Sambonsugi teaches an object extraction method (abstract, last 3 lines; FIG. 1, element 2; FIG. 27, element 224) comprising:

Preparing a plurality of candidate regions of shape data (FIG. 8 and FIG. 47); and

Setting as a provisional region of an extraction object, one of the candidate regions which exhibits a largest difference (absolute difference) between a statistical characteristic of inside pixel values and that of outside pixel values to generate initial shape data representing the provisional region (FIG. 46, S14 and column 43, lines 10-30); and

Matching a contour of the initial shape data to a contour of the extraction object by using current image data and the initial shape data (FIG. 48, S31-S36), the current image data obtained by capturing the extraction object.

Referring to claim 6, Sambonsugi further teaches a method wherein setting comprises comparing the current image data with background image data acquired in advance without capturing the extraction object, and setting a region in which the current image data differs in value from the background image data as a provisional region of the extraction object (FIG. 47, S14; FIG. 8; FIG. 13, FIG. 14A-B and FIG. 15).

For claim 7, Sambonsugi teaches a method wherein the setting comprises, holding image data of a frame from which a region of the extraction object has already been obtained and shape

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data as reference image data and reference shape data, respectively, performing motion detection with respect to the current input image data corresponding to the first image data by referring to the reference image data, and performing motion compensation for the reference shape data on the basis of the motion detection result to generate the initial shape data (FIG. 5; FIG. 6 and FIG. 47).

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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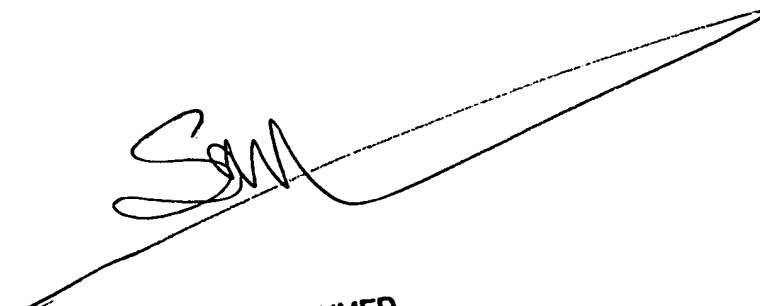
Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Q Le whose telephone number is 703-305-5083. The examiner can normally be reached on 8:30 A.M - 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on 703-308-6604. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

BL
May 26, 2004



**SAMIR AHMED
PRIMARY EXAMINER**